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ABSTRACT

A national survey investigated curriculum processes in programs serving deaf students. The survey was part of a larger project undertaken by the Systematic Collaborative Outreach Project Effort (SCOPE). A representational sample of teachers (N=308) and administrators (N=47) from small, medium, and large day schools and from medium or large residential programs was surveyed. Respondents were queried for the following information: (1) a curriculum description; (2) processes used for curriculum development and monitoring; (3) curriculum training efforts; (4) use of instructional materials; and (5) curriculum review and revision procedures. Results indicated that large day school programs were most likely to have documented curriculum components. Both day and residential schools affirmed a need to use curriculum specifically designed for deaf students; however, day schools more often choose to or were required to modify existing state curricula, while residential schools more often chose to develop their own curricula. Large programs reported providing a greater variety of training activities than did smaller programs. Teachers were often responsible for developing, monitoring, reviewing, and revising curricula. School officials and teachers relied more on internal than external sources to identify strengths and weaknesses in their curricula. Resultant recommendations focus on training activities for teachers, documentation of curriculum components, teacher use of print media, and information dissemination of available curricula. Appendices include the administrators' survey instrument, the teachers' survey instrument, and graphs of data. (CB)

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SCOPE

Systematic Collaborative Outreach Project Effort

A Status Report of Curriculum Processes in Programs Serving Deaf Students

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SCOPE

Systematic Collaborative Outreach Project Effort

A Status Report of Curriculum Processes in Programs Serving Deaf Students

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Final report of SCOPE, November 1985

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INTRODUCTION

The Systematic Collaborative Outreach Project Effort (SCOPE) is a joint project of Gallaudet College's Pre-College Programs (PCP) and the National Technical Institute for the Deaf at the Rochester Institute of Technology (NTID at RIT). As part of the project, a nationwide survey was conducted to collect information on the curriculum processes used in programs serving deaf students in the United States. The purpose of this survey was to collect information and data from a representative sample of day school and residential programs that could result in more focused and effective outreach efforts on the part of both institutions.

Gallaudet College and NTID at RIT are specifically mandated to develop and disseminate model instructional programs and materials. Hearing loss imposes specific educational problems that require unique curriculum solutions. The curriculum areas of mathematics, science, reading, and writing which form the foundation for academic success of all students are especially critical for deaf students. If deaf students are to acquire the same competencies as their hearing peers in these and other curriculum areas, specialized instructional strategies must be used to meet their learning needs.

The task of maintaining current curricula in a changing world requires the integration of external and internal resources in an ongoing cyclical process. This task is made more complex by the demands of educating deaf students, because the curricular needs of the various schools and programs differ greatly. The literature of innovation and change in education (Welsh, 1983) is replete with examples of models developed in one place being found unacceptable or inappropriate in other programs. Some of the factors that are necessary for successful changes in curriculum are: (1) a real and perceived need for the change, (2) local control of the change, and (3) adequate training received prior to the change (Fullan, 1982; Louis and Sieber, 1979). Therefore,

knowledge of existing conditions and local priorities is necessary if NTID at RIT and Gallaudet College are to have a significant, positive impact upon curricula in programs serving deaf students.

HISTORY AND RATIONALE OF THE PROJECT

Collaboration between NTID at RIT and PCP began in 1978 with two working conferences on career education and the hearing impaired. Those national conferences led to the establishment of the National Project on Career Education (NPCE), a jointly sponsored outreach project. Utilizing the needs assessment data and the motivation stimulated by the two working conferences, NPCE produced materials and training modules to assist programs serving the deaf in planning, implementing, and evaluating instruction in career education. At the end of the project in 1982, more than 60 programs serving deaf students across the United States had received training through NPCE.

A major premise of NPCE was the strategy of infusing career education instructional objectives into existing curricula, rather than the development of a separate stand-alone career education curriculum. As schools progressed through the NPCE planning and implementation phases, it became apparent that the success of the infusion strategy depended on the comprehensiveness and viability of the existing curricula. The strength of curricula within programs varied widely. A strong curriculum did not seem to guarantee a successful infusion of career education objectives, but it served as a necessary condition for success (Egelston-Dodd and DeCaro, 1982).

Additional indicators of need for attention to curriculum became apparent from outreach data based upon the types of requests for technical assistance and services from schools around the country. Information gathered from these sources indicated high priority in the education of deaf students for improved processes and procedures for the development, implementation, and evaluation

of curricula and curriculum materials. The "back to basics" movement in public education called for a reexamination and reemphasis of reading, writing, math, and science instruction.

In 1982, in response to concerns about viability and comprehensiveness of curricula in programs serving deaf students, two jointly sponsored projects were begun.

1. CASP (Career Awareness Summer Program) was a project to develop a stand-alone, short-term, intensive career education instructional program for deaf high school sophomores. The advantage of CASP was that it was not dependent on existing curricula in career education or other areas. CASP could be offered as an adjunct program to schools with comprehensive infused career education curricula or to those with no career education curriculum of any form.

2. SCOPE (Systematic Collaborative Outreach Project Effort) was a project that included an investigation of the development processes for curricula in reading, writing, math, and science, from preschool through high school levels in schools serving deaf students.

Members of the SCOPE Project Team (see Appendix A: SCOPE Team Members) met with advisory groups (see Appendix B: SCOPE National Advisory Board Members) to plan specific goals and procedures for this joint project. As a result of these deliberations, the following project goals were established:

1. A national survey of a representational sample of teachers and administrators in programs that serve deaf students would focus specifically on the four subject areas of math, science, reading, and writing. The survey would gather data on:

- Curriculum development, implementation, and revision processes.
- Identified areas of need in these schools for instructional materials and resources to support their curricula.
- Identified needs in the area of training teachers in curriculum materials development.
- Suggested approaches and methods for curriculum development and revision.

2. A review of literature on the curriculum change process as it occurs in K - 12 programs.
3. The identification of curriculum resources at Gallaudet and NTID at RIT that might be used in outreach efforts.
4. The development of a set of recommendations and an action plan for future joint Gallaudet/NTID at RIT collaboration in curriculum assistance to schools serving deaf students.

The Project Team and Advisory Board agreed to examine the curriculum processes occuring within schools rather than examining curriculum content. This decision was based in part on the many requests received by NTID at RIT and Gallaudet for technical assistance related to improved processes and procedures for the development, implementation, and evaluation of curricula. Further, it is clear that curriculum content cannot be examined or evaluated in a systematic manner without the supporting curriculum processes in place.

After comparing a number of accepted curriculum models, the Project Team selected, through consensus, those components that appeared to be universally necessary to a complete process of curriculum development, implementation, evaluation, and revision.

METHODOLOGY

Sample Site Selection: Gallaudet College's Center for Assessment and Demographic Studies provided a list of programs serving hearing impaired

students in the United States, based upon its Annual Survey of Hearing Impaired Children and Youth. From this list, which is estimated to include 75 percent of the hearing impaired students in school programs in the United States, a representative sample was drawn, including 10 programs in each of six categories: (1) day school programs serving fewer than 30 students; (2) day school programs serving from 30 to 100 pupils; (3) day school programs with more thal 100 students; (4) residential programs having fewer than 30 students; (5) residential programs with 30 to 100 students; and (6) residential programs having more than 100 pupils. No programs were found within category four above; thus five program types, defined by size and type of school, were included in the study. The lists used identified the number of potential day school programs as 816, and the number of residential programs as 67.

The sites initially selected were rechecked to insure that they met the following criteria: (1) the student enrollment figure used for program size classification represented students with severe to profound hearing impairments; (2) all the programs offered instruction in some, if not all, of the subject areas being investigated; (3) the student enrollment figure used for program size classification represented students who were not mainstreamed for the subject areas being investigated; (4) each program served at least five eligible students; and (5) there was a geographical balance in the sample.

As a result of the verification process, the potential number of schools in each category changed. Some schools did not meet criteria in any category. Some schools changed category in terms of program size. Initial contact was established with the superintendent of each potential survey site via a letter. A follow-up telephone call was placed to discuss the school's participation, to finalize the agreement to participate, and to identify the administrator responsible for making final curriculum decisions. Once agreement was

finalized, a letter of confirmation was sent to the superintendent.

For a variety of reasons, some of the potential survey sites did not participate in the project. Some of the reasons given for not participating were: a) school undergoing administrative reorganization or curriculum review and revision, b) school closing, c) school not meeting selection criteria, and d) school declining to participate.

Following the verification and confirmation processes, 47 programs were committed to participation in the project (see Appendix C: SCOPE Survey Sites). The programs participated in two surveys; the first involved administrators responsible for curricula, and the second involved teachers from those same programs.

Focus of the Surveys: The surveys asked for several kinds of information:

1. A description of the components of the curriculum and their sources: Curriculum description refers to the kinds of written documents that define the components of a curriculum and serve as indicators that a curriculum had been planned and documented.
2. The processes used for curriculum development and monitoring: Curriculum development processes refer to the procedures used in developing the components of a given curriculum from original goals through objectives, test items, instructional sequences and activities, and testing of student performance. Curriculum monitoring processes refer to the procedures for monitoring the implementation of the curriculum to ensure that its established goals and objectives are taught. This process might typically include review of lesson plans, course syllabi, and course activities; testing; monitoring of the training of teachers in skills and knowledge areas that support the curriculum; classroom observations; and discussions

with teachers.

3. The training efforts to implement and support the curriculum: This refers to training activities that are designed to facilitate the implementation of a curriculum.
4. The use of instructional materials: This refers to the types of instructional materials that are used by teachers implementing the curriculum, and the sources of these materials.
5. The procedures used to review and revise the curriculum: This refers to the people and procedures used to conduct an ongoing curriculum review and revision process. Key elements in this process include formal and informal procedures for review.

Respondents were also asked to provide information on the strengths and weaknesses of their curriculum processes. The surveys were designed to encourage open-ended responses in most areas, resulting in a more flexible and realistic tool for gathering data. The information obtained in the surveys was specific to the subject areas of mathematics, science, reading, and writing at the preschool, elementary, junior high, and senior high school levels.

Administrators' Survey: Figure 1 (page 63) illustrates the number of programs whose administrators were surveyed in each of the five categories. Forty-seven administrators participated in the survey, which was conducted in the spring and summer of 1983. The survey of administrators was conducted on the telephone by interviewers trained for this specific study by members of the Project Team. This approach was selected for the following reasons: (1) anticipated higher return rate, (2) capability for providing clarification, (3) ability to establish personal rapport, and (4) opportunity to use open-ended questions more effectively.

Interview guidelines and documentation were developed to insure that

both administrators and interviewers would be working with the same operational definitions and understandings regarding the questions and terminology contained in the survey. Three graduate students and one administrative assistant were hired for the purpose of conducting the interviews. The interviews received approximately 16 hours of training and practice in the interview process. Their training consisted of the following sequence of events: (1) briefings on the nature and goals of the project; (2) familiarization with the survey questionnaire and its content; (3) step-by-step discussions of the interview process; (4) familiarization through discussion of the interview guidelines and notes; and (5) practice telephone interview sessions, with debriefings and suggestions for improvement from Project Team members involved in the training.

A limited pilot study for the administrator interviews was conducted at Gallaudet College using the Model Secondary School for the Deaf and Kendall Demonstration Elementary School as the survey sites. Those pilot surveys served two purposes: to provide experience and feedback on the survey procedures and time required to complete them, and to offer advanced training for the interviewers.

Once the names of the survey site administrators were known, a letter was sent to each explaining the exact nature of the project and their involvement in it. This was accompanied by an overview of the project and a copy of the interview guidelines and documentation. A telephone call was then made to schedule the interview. During the telephone conversation, the administrator was asked to begin thinking about teachers within the school program who would fit the criteria for the teachers' survey to be conducted later. It was requested that the potential interviewees be classroom teachers of deaf students in the subject areas and grade levels to be surveyed, and that the teachers not also be administrators. The administrators were asked to have

the names of these teachers ready when the telephone interview was conducted. Some interviews included follow-up calls made for clarification of certain information from some survey sites. (See Appendix D: Administrators' Survey.)

Teachers' Survey: The second survey was completed by teachers and was conducted by mail during the fall and winter of 1983. The teachers' survey focused on how teachers were involved in curriculum processes; what types of instructional materials they developed and used; and how much input they had in bringing about changes in curricula. (See Appendix E: Teachers' Survey.) A mail survey was used because: (1) this approach was best suited to the schedules of teachers; (2) teachers might not have comfortable access to a telephone for the length of time required for a telephone survey; and (3) large numbers of teachers were involved.

Five hundred forty questionnaires were mailed. The survey form, a letter explaining the survey process, a project overview, and a stamped return envelope were sent to the teachers who had been identified as participants in the survey. Following the mailing, an interval of one month was given for return of the surveys. Then follow-up letters were mailed to non-respondents, asking them to return their responses. A two-week interval was allowed after the follow-up letter. Teachers who had not returned their surveys by that time were contacted by telephone. No further follow-up was conducted.

Table 1 shows the number of questionnaires mailed to and completed by teachers for each type of program, and the rate of return. The overall rate of return for completed questionnaires was 57 percent. Figure 2 (page 64) shows the number of completed questionnaires received from teachers in each category, and the grade level for which the questionnaires were completed. Three hundred eight teacher questionnaires were completed, representing 45 different school programs.

TABLE 1. Numbers of teacher questionnaires mailed and completed.

Type of Program	Questionnaires		
	# Mailed	# Completed	% Returned
Day school programs with fewer than 30 students	120	55	46
Day school programs with 30 to 100 students	99	51	52
Day school programs with more than 100 students	91	58	64
Residential school programs with fewer than 30 students	0	—	—
Residential school programs with 30 to 100 students	130	66	51
Residential school programs with more than 100 students	100	78	78
TOTALS	# 540	# 308	57%

Two programs were represented in the administrators' data, but not in the teachers' data. Teachers in one program failed to return any of their questionnaires. In the other program, proposal procedures were required by its teachers' organization for gathering data. Time did not allow us to go through those procedures for clearance to do the study.

RESULTS

Responses to the surveys were analyzed to determine trends in answer patterns among the respondents and difference patterns among types of schools, grade levels, and subject areas.

Curriculum Components: The curriculum components included in the survey are listed in Table 2. Of the 47 school administrators surveyed, 38 percent reported having all curriculum components for all subjects and grade levels in

their schools; 8.5 percent reported having none of the curriculum components in any subject or level in their schools. Thus, the majority of schools (53.5 percent) had some of the components for some of the subjects and levels they offered (Figure 3 page 65).

TABLE 2. Curriculum components included in questionnaire.

Statement of philosophy
Statement of goals
Summary of skills and/or competencies to be achieved
Course outlines and/or descriptions
Listing of topic area goals
Listing of course objectives
Listing of course unit objectives
Statement of testing guidelines and/or listing of test items
Listing of supporting resources and/or materials
Description of learning activites and/or experiences to support objectives
Description of curriculum evaluation processes
Description of procedures for curriculum revision

Analysis of variance procedures showed that the degree to which the existence of curriculum components differed across program types was significant [$F(4,42) = 6.6$, $p < 0.01$] and that the degree to which the existence of curriculum components differed across subject areas was also significant [$F(3,42) = 6.1$, $p < 0.01$]. Large day school programs were most likely to report having these components while medium-size residential schools were least likely; and these elements were more likely to exist in the subject areas of math and reading than in science and writing. The most frequently reported curriculum components included: course outlines or descriptions, listings of topic area goals, listings of course objectives, and listings of course unit objectives. The least frequently reported components were: listings of supporting resources and materials, statements of testing guidelines or listings of test items, descriptions of learning activities or experiences to support objectives, descriptions of curriculum evaluation processes, and descriptions of procedures for curriculum revision.

School administrators also were asked about the sources of their programs' curricula, whether or not their present curricula had been modified from the original sources and, if so, by whom (Figure 4 page 66). The most frequently reported original source of curricula was the school itself (34 percent) and the least frequent source was other schools (15 percent). Analysis of variance procedures indicated that the difference in source of curriculum across the types of programs included in the survey was significant [$F(4,42) = 5.8$, $p < 0.01$]. The most frequently reported source for day schools was the state or district (32 percent) and their own school for residential schools (84 percent). The least frequent source for day schools was another school (14 percent), and the state or district for residential schools (5 percent).

The curricula used by the programs in the survey were also likely to have been modified; only 15 percent of the programs reported using unmodified curricula in any subject or level. When curricula were modified, the work was usually done by the school itself. Curricula specifically developed by the school itself for deaf students were most frequently used in large residential programs, while none of the large day schools reported using such curricula.

Curriculum Development And Monitoring: More than 80 percent of the school administrators indicated their programs had written plans for developing and monitoring their curriculum. Correlation analysis indicated that an individual administrator's responses tended to be similar across all subject areas within his or her program, but that differences existed between grade levels (Figure 5 page 67). All large day school programs reported they had a written plan for each grade level they offered. Written plans were least likely to exist in small and medium-size day schools for their elementary, junior high, and senior high levels. In general 72 percent of senior high levels levels did not possess written plans, while preschools (95 percent) most often had such

plans.

Few plans for curriculum development and monitoring specified that time be set aside for actual work on these activities (Figure 6 page 68). Time was allotted in about 85 percent of the large day school programs in all grade levels and subject areas, while medium-size and small day school programs did so in about 40 percent of their programs. Residential schools fell between these two extremes, with about 60 percent reporting that their plans specified times to be set aside.

Administrators (75 percent) reported that teachers in their schools were the personnel most often involved in curriculum development and monitoring. Teachers were also asked whether they had participated in developing their schools' curricula and if so whether they had actually done the development work or had only provided input for development work that was done by others. The teachers' responses agreed with those of the administrators. Approximately 80 percent of the teachers surveyed indicated they had participated in development of the curriculum. Within this group about 65 percent reported that the teachers themselves did the development work, while about 35 percent indicated that others, for example, curriculum specialists, supervisors, and soon, did the actual work with teachers providing input only. Differences were, however, observed for the types of curriculum components in which teachers do development and monitoring work (Table 3). Activities in which more than 50 percent of the teachers reported involvement included: defining and writing goals and objectives; writing curriculum outlines; identifying and reviewing texts and other curricula; evaluating the effectiveness of curricula; developing strategies for testing students' performances; and monitoring the suitability of content and materials. They were less likely to do work involved with defining and writing statements of philosophy, or monitoring to insure that instructional objectives were taught.

TABLE 3. Teachers' involvement in curriculum development and monitoring tasks.

Task	Percent of teachers reporting involvement
Definition and writing of philosophy	45
Definition and writing of goals and objectives	59
Writing and planning comprehensive curriculum outlines	53
Identification and review of texts	57
Development of strategies for testing student performance	57
Development of curriculum evaluation activities and strategies	54
Monitoring teaching of objectives	49
Monitoring suitability of content	58
Identifying content areas responsive to students' needs	55
Identifying materials responsive to students' needs	62

Training In Curriculum Implementation: Teachers and administrators reported on the training in curriculum implementation that had occurred in their schools, and on the areas in which they thought training was most needed. Table 4 lists the activities included in the questionnaire. More than half of the administrators reported that their teachers had received training in most of the topics, most frequently in developing and writing objectives. While 85 percent of the administrators reported training in this area had occurred in their schools, only 45 percent of the teachers reported training in this area.

TABLE 4. Training activities included on questionnaire.

Development and writing objectives
Interpreting objectives
Developing test items and measurements
Sequencing content
Developing activities and materials
Locating resources
Selecting materials
Modifying materials
Field testing and revising materials
Documenting instructional activities

Analysis of variance procedures showed that the degree to which the training activities differed across program types was significant [$F(4,42) = 5.6$, $p < 0.01$]/ According to administrators, all of the medium-size and large day schools had provided training in developing and writing objectives; however, only 20 percent of the small day schools reported that this topic had been addressed at their preschool levels and about 55 percent at their elementary, junior, and senior high levels. Training was least likely to occur in the areas of field testing and in documenting instructional activities. The lack of this training was most noticeable in small day school programs where training in these areas was available in fewer than 35 percent of the programs surveyed. The remaining areas were receiving training attention in 70 percent of the programs.

There was no training topic for which at least 50 percent of the administrators or teachers reported additional training was needed. The areas in which at least 25 percent of the teachers and administrators indicated a need were developing test items and designing activities and materials. All topic areas reported as need areas by 25 percent or more of the administrators were also reported as need areas by 25 percent or more of the teachers. However, training in sequencing content, selecting materials, modifying materials, field testing and revising materials, and documenting instructional activities were indicated as needs by more than 25 percent of the teachers, but not by 25 percent of the administrators.

Teachers and administrators were asked to indicate how curriculum-related training or information-sharing activities had occurred in their programs. Table 5 illustrates the responses obtained from teachers. Teachers and administrators reported that in-service workshops were most frequently used to provide

training. Administrators reported that training offered by consultants was occurring in about 65 percent of the programs surveyed; however, only 29 percent of the teachers indicated that training by consultants had been available. Training offered by professional organizations was indicated by only about 10 percent of the administrators and teachers. Teachers were also asked to indicate the types of training they were finding most useful. The only type selected by more than 50 percent was in-service workshops.

TABLE 5. Environments in which training or information sharing activities occur in schools.

Environment for training	Percent of teachers reporting frequent occurrence
In-service workshops	63
In-service lectures	54
Training from school-hired consultants	29
Formal coursework	29
Training through professional organizations	11
Self-study through use of texts, workbooks, etc.	51
Peer tutoring among teachers	37

Administrators were asked to indicate who delivered the training offered in their programs. Personnel from within their own programs were used by 72 percent of the programs and external personnel were used in 89 percent of the programs.

Use Of Instructional Materials: Teachers were asked which instructional materials they most frequently relied upon and which they would prefer to use if they were available and affordable. Table 6 lists and rank orders the materials included in the questionnaire (1 = most frequent response), including items currently used and preferred items. There were discrepancies between the ideal and what was in use. For example, computer software was the most frequently mentioned ideal material, but it was not frequently in use. Overhead transparencies were very frequently used but ranked low in preference.

TABLE 6. Teachers' ratings of frequency of use and desirability of instructional materials.

Types of material	Rank order for frequency of use	Rank order for preference
Handouts	1	7
Pictures	2	13.5
Workbooks	3	3
Textbooks	4	2
Overhead transparencies	5	12
Encyclopedias, dictionaries, etc.	6	15
Other books (fiction, non-fiction)	7	13.5
Supplementary print materials	8	9
Films	9	5
Filmstrips	10	8
Computer software	11	1
Packaged games	12	11
Videotapes	13	4
Slides	14	10
Educational TV (network, cable)	15	6
Filmloops (super 8)	16	16

Teachers were also asked to indicate the two most common sources for materials used to support their curricula (Table 7). Seventy-six per cent of the teachers in the survey reported that materials currently being used were developed by teachers; 43 percent were using materials from commercial sources that had been adapted by teachers. Instructional developers and consultants as sources were indicated by fewer than 8 percent of the teachers.

TABLE 7. Sources for materials used to support curricula

Source	Percent using source
Developed by teachers	76
Adapted from materials produced commercially	43
Purchased from commercial sources	41
Developed in the school by instructional materials developers or team	7
Developed by consultants	1

Curriculum Review And Revision Processes: Administrators were asked to indicate how they gathered information for curriculum review and revision processes (Table 8), and which methods were most effective. A variety of methods were being used in the schools that participated in the study. The only categories indicated by more than 40 percent of the administrators were surveys, questionnaires, and discussions with teachers and supervisors. Even though these methods were most often used, administrators indicated they were not the most effective procedures. No clear pattern of consensus emerged as to which methods were thought to be the most effective.

TABLE 8. Methods for gathering information on curriculum review and revision.

Formal periodic meetings
Written suggestions from teachers
Formal data collection such as surveys or questionnaires
Discussions involving teachers and supervisors
Observations by supervisors

Both teachers and administrators were asked to select five factors from a list of 18 that had been the most influential in their schools as curricula were reviewed and revised (Table 9). As a group, about two-thirds of the administators reported that individual educational plans, needs assessments, and teachers were among the five most influential factors. All other factors were indicated by fewer than 35 percent of the respondents. Teachers' reports agreed with those of administrators. Analysis of variance procedures revealed that the degree of importance of the various factors differed across types of schools [$F(17,29) = 3.1$, $p < 0,01$], Local mandates were more often viewed as influential factors by large and medium-size day programs than by residential schools. Student feedback was mentioned as an influential factor in residential schools, but not in day school programs.

TABLE 9. Potential influential factors in curriculum review and revision processes.

Individual Educational Plans (student needs)
Needs assessments
State mandates/laws
Local mandates/laws
Community influence
Parents
Teachers
Curriculum specialists
Student feedback
Administrators in the program
Board of education
Accreditation processes or guidelines
Commercially produced textbooks
Previously existing curriculum
Current development theories or literature
Educational consultants
Monetary constraints
Personnel shortages

Teachers and administrators were also asked which of the 18 factors should be influential in their curriculum review and revision process. The factors most often selected were the same as those currently in use.

Administrators were asked which personnel were responsible for making curriculum review and revision recommendations, and which were responsible for making decisions. Table 10 lists the personnel categories included on the questionnaires. Teachers were most frequently reported as responsible for making recommendations. About 60 percent of the administrators indicated teachers had responsibility for making recommendations. In residential schools about 50 percent of the principals also had this responsibility for making curriculum review and revision decisions. While no clear pattern of responsibility emerged, teachers were never reported by administrators as responsible for making these decisions.

TABLE 10. Personnel responsible for making curriculum recommendations and decisions.

Superintendent, director, or head of the school
Assistant director or superintendent
Principal of the school or program
Assistant principal of the school or program
Curriculum specialist or developer
Team leaders or master teachers
Department chairpersons
Supervising teachers
Teachers
Outside consultants

Teachers were asked to indicate whom they viewed as key personnel in curriculum review and revision recommendations and decisions. Sixty-six per cent reported that teachers were key personnel in these processes. Curriculum specialists and principals were considered key individuals by about 35 percent of the teachers, and supervising teachers by about 25 percent of the responses. No other personnel group was selected by more than 15 percent of the teachers.

Strengths And Weaknesses Of Curriculum: Both administrators and teachers were asked an open-ended question regarding the strengths and weaknesses of their schools' curricula. The responses (Table 11) indicate that programs value curricula that are flexible and at the same time provide procedures for handling a variety of situations. Furthermore, administrators and teachers in programs where curricula had been originally developed for deaf students identified this feature as a definite strength. Curriculum evaluation and monitoring procedures were most frequently cited as weak areas in curricula.

TABLE 11. Strengths and weaknesses identified in existing curricula by at least 10 percent of the respondents.

STRENGTHS	WEAKNESSES
Flexibility of curriculum.	Evaluation process doesn't allow update or review on a regular basis.
Curricula developed for deaf students.	Lack of good text materials.
Consistent procedures related to different situations.	Lack of consistent monitoring process.
Consistent procedures for evaluating student performance.	Language level of curriculum often too high.
Input and feedback from parents and teachers.	More time needed to devote to curriculum.
Good selection of resource materials and texts.	
Procedures allowing for curriculum updating.	

Respondents claimed that improvement in these areas would enable them to review and update their curricula on a more regular basis. A need for improved text materials was also identified, together with reports that the current language level of the curriculum was too high.

Finally, teachers and administrators were asked to indicate how they determined their curricula's strengths and weaknesses. Both groups claimed to rely more on internal than on external sources (Table 12). Direct use, experience, and observation; teacher feedback; and student performance were the most frequently cited sources of information. These sources were indicated by more than 50 percent of the administrators surveyed; while consultants, accreditation teams, alumni feedback, and community feedback were indicated by fewer than 25 percent. Analysis of variance procedures indicated that the degree to which the various sources were utilized did not differ across types of programs [$F(10,36) = 0.8$, $p > 0.1$].

TABLE 12. Sources for determining curriculum strengths and weaknesses, and frequency of usage.

Sources indicated by more than 50 percent of administrators:
Direct use, experience, and observation
Teachers
Student performance
Sources indicated by 25 percent to 50 percent of administrators:
Review by curriculum teams
Parents
Administrative reviews
Research and current literature
Sources indicated by fewer than 25 percent of administrators:
Consultants
Accreditation teams
Alumni
Community

CONCLUSIONS

The existence of documented curriculum components increases the consistency of a school's curriculum across grade levels, and provides a foundation upon which decisions can be made. The finding that large day school programs were the most likely to possess these curriculum components leads to several hypotheses: (1) The presence of a large number of deaf students encourages a school to be more conscious about the need to document and organize its curriculum so that the program can be more efficient; (2) It is likely that a large program will have more than one teacher teaching each of the subjects, and it is necessary for teachers to be more consistent in a large program; and (3) The curriculum followed when teaching deaf students in large day school programs may be influenced by the existence of similar components in the curriculum used to teach normally-hearing students in these same programs.

The influence of size and coexistence within districts serving normally-hearing students was also detected in the administrators' responses to a

question about their curriculum sources. Both day and residential schools had usually seen a need to use curriculum specifically designed for deaf students. Day school programs, however, chose or were required to modify the existing state or district curricula, while residential schools more often chose to develop their own original curricula.

Responses related to questions about strengths and weaknesses of curricula indicate that teachers and administrators see a need for curricula based on evaluation and area sensitive to deaf students' special needs for suitable text materials. Schools that have not developed their own materials may not be familiar with the materials developed for deaf students by other schools; or schools with such materials may not be making them available to other programs.

Large day and residential programs reported providing a greater variety of training activities for their teachers than did other programs. Teachers as a group perceived a somewhat greater need for additional training than did administrators. An interrelationship exists between training, recognition of the need to document curriculum, and knowledge of the critical aspects of curricula (McLaughlin & Marsh, 1978).

The results of both the administrators' and the teachers' surveys indicate that teachers are often responsible for developing, monitoring, reviewing, and revising their school's curricula. Additionally, many instructional materials used in classes for deaf student are typically developed and prepared by teachers. It may not be reasonable to expect teachers to be skilled in all of these tasks in addition to teaching. Further, it is unlikely that even highly skilled teachers can do all tasks equally well or have adequate time for them. Nonetheless, assuming that this pattern of responsibility will

continue, it is teachers who have the greatest influence on curriculum change and it is they who must be addressed and involved for change to be successful.

School officials and teachers rely more on internal than external sources to identify strengths and weaknesses in their curricula. This suggests that program personnel feel most comfortable when they are the ones making judgements about their curricula. It also indicates that curriculum change will be unlikely unless these sources indicate it is needed. This conclusion is supported by Fullan (1982) and Little (1981) who find that successful changes are most likely to occur where the need for change exists and is perceived by those who will implement the changes.

RECOMMENDATIONS

The results of the surveys of both administrators and teachers in programs serving deaf students lead to several recommendations. Agreement between administrators and teachers was high on items included in both questionnaires. There were more similarities than discrepancies in the perceptions of teachers and administrators. This finding indicates open communication channels between teachers and administrators; it is highly recommended that this communication continue.

When discrepancies between teachers' and administrators' responses occurred, they were most often observed in the area of training. For example, fewer than 25 percent of the administrators, but between 25 and 49 percent of the teachers indicated a need for additional training in five areas: sequencing content, selecting materials, modifying materials, field testing and revising materials, and documenting instructional activities. Also 65 percent of the administrators reported training by consultants in their schools; only 29 percent of the teachers reported that such training was available. It is

recommended that the perceptions of administrators and teachers regarding training efforts be carefully considered within each school to determine if these perceptions are accurate. If discrepancies are explained by the fact that teachers are not necessarily aware of all training efforts occuring in their schools, it is recommended that administrators insure that all teachers are informed about training opportunities. It is also recommended that all teachers be invited to participate in training activities related to curriculum. This recommendation is based on the finding that teachers reported a high level of actual work in all aspects of curriculum.

While most schools reported that they had developed or revised their own materials especially for deaf students, they also reported a desire for more materials designed or adapted for use with deaf students. Even though teachers were most often responsible for this development and revision work, they indicated that they had received the least amount of training in documenting instructional materials. More than 25 percent of teachers also indicated a need for additional training in modifying existing curricula. It is, therefore, recommended that greater attention be given to the training of teachers in: (1) documenting instructional activities, (2) modifying materials, (3) developing test items, (4) designing activities and materials, (5) sequencing content, (6) selecting materials, and (7) field testing and revising materials.

Responses to the surveys indicate that there are some schools in which none or only a few of the components critical to a complete curriculum were present. Concurrently, both administrators and teachers most frequently cited curriculum evaluation and monitoring procedures as weak areas in their present curricula. Because improvement in the documentation of components critical to a curriculum would enable schools to review and update their curricula on a more regular basis, it is recommended that attention be given

first to the documentation of curriculum components related to evaluation and monitoring procedures.

The results of the teachers' survey indicated some discrepancies between the types of materials currently in use and those teachers would prefer to use. For example, overhead transparencies and pictures were rated as frequently used but not as ideal. Because of their availability and low cost, training in the development and use of these types of materials should be undertaken. Conversely, teachers rated computer software as a preferred medium, but not as one now in frequent use. Thus, training in the application of computers for instruction is also warranted. Given the high ratings of workbooks and textbooks in both actual and preferred situations, clearly a need exists to train teachers in improved use of these print media.

The survey did not include a question regarding whether or not schools were aware of curricula used by other programs serving deaf students. However, the finding that many schools modify or develop their own materials for use with deaf students indicates that programs may not be familiar with the development and revision work that has occurred in other programs. Clearly, there is need for a clearinghouse for the dissemination of information about available curricula.

Finally, the surveys indicated a different array of strengths among day school and residential programs. Many of those differences are complementary rather than opposing. It is recommended, therefore, that a system for collaboration be considered. Such a system may have potential benefits for both kinds of programs.

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Appendix A: SCOPE Team Members

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Additional advisory assistance was provided by members of Gallaudet College's Center for Assessment and Demographic Studies, formally known as the Office of Demographic Studies, Washington, DC.

APPENDIX C: SCOPE Survey Sites

Day Schools: 5-30 students, (N=10)
Childrens Center of Montgomery, AL
El Dorado County Schools, CA
Fulton County Schools, GA
General Concord School District, MA
Holland Public Schools, MI
Killeen Regional Day School, TX
Logansport Joint Special Education, IN
School District of LaCrosse, WI
Shelby County Board of Education, AL
Yonkers Public Schools, NY

Day Schools: 30-100 students, (N=9)
Anchorage School District, AK
Escambia County Schools, FL
Garden Grove Unified School District, CA
Grossmont Union High School, LaMesa, CA
Highline Public Schools, Seattle, WA
Lorain City Schools, OH
Magnolia Speech School for the Deaf, Jackson, MS
Passaic County Schools, NJ
Washington, DC, Public Schools

Day Schools: more than 100 students, (N=9)
Alexander Graham Bell School, Cleveland, OH
Amarillo Regional Day School for the Deaf, TX
Broward County Schools, FL
Fairfax County Schools, VA
Hennepin Technical Centers, St. Louis, MN
Lake County Schools, IL
Memphis City Schools, TN
Montgomery County Public Schools, MD
St Francis DeSales School for the Deaf, Brooklyn, NY

Residential Schools: 30-100 students, (N=10)
Austine School for the Deaf, Brattleboro, VT
Beverly School for the Deaf, MA
Boston School for the Deaf, Randolph, MA
Colorado School for the Deaf, Colorado Springs, CO
Governer Baxter School for the Deaf, Portland, ME
Montana School for the Deaf, Great Falls, MT
Oklahoma School for the Deaf, Sulphur, OK
Scranton School for the Deaf, PA
South Dakota School for the Deaf, Sioux Falls, SD
Virginia School for the Deaf & Blind, Hampton, VA

Residential Schools: more than 100 students, (N=9)
Arizona School for the Deaf, Tuscon, AZ
Florida School for the Deaf, St. Augustine, FL
Kentucky School for the Deaf, Danville, KY
Illinois School for the Deaf, Jacksonville, IL
Mississippi School for the Deaf, Jackson, MS
Rochester School for the Deaf, NY
Ohio School for the Deaf, Columbus, OH
South Carolina School for the Deaf, Spartanburg, SC
Washington State School for the Deaf, Vancouver, WA

CURRICULUM DESCRIPTION

1. The first few questions are about your curriculum in general and its source. Please look at the list of potential curriculum elements on page 1 of your interview notes. Which of these elements does your _____ (K-6) level _____ (math) curriculum contain?

INTERVIEWER'S INSTRUCTIONS

- Repeat the question for each subject area and grade level that has been identified for this respondent.
- If the respondent indicates a given response (i.e. "c") and wants to clarify what they did or give you more information - then record that information in the "other, please explain" area and draw a line from "c" to the explanation.

Potential Curriculum Elements	MATH				SCIENCE				READING				WRITING			
	Pre-K	K-6	7-9	10-12	Pre-K	K-6	7-9	10-12	Pre-K	K-6	7-9	10-12	Pre-K	K-6	7-9	10-12
a. statement of philosophy																
b. statement of goals																
c. scope and sequence (summary of skills/ competencies)																
d. course outlines/descriptions																
e. topic area goals																
f. course objectives																
g. course unit objectives																
h. test items/testing guidelines																
i. list of supporting resources and materials																
j. learning activities/experiences that support objectives																
k. description of evaluation processes																
l. procedures for curriculum revision																
m. other(s), please explain																
_____																
_____																
_____																

2. How would you describe the original source of your _____ curriculum? Does the source of your curriculum match any of the sources on page 2 of your interview notes?
(K-6 Math)

INTERVIEWER'S INSTRUCTIONS

- Repeat the question for each subject area and grade level group.
- Be aware if they have already revealed the source of the curriculum (e.g., textbook series). Use probing questions to clarify whether it is state or district mandated and whether it is modified or unmodified.

NOTE: * = or program	MATH				SCIENCE				READING				WRITING			
	Pre-K	K-6	7-9	10-12	Pre-K	K-6	7-9	10-12	Pre-K	K-6	7-9	10-12	Pre-K	K-6	7-9	10-12
a. state /district unmodified																
b. state/district modified by the state/district																
c. state/district modified by your school*																
d. commercially developed unmodified																
e. commercially developed modified by your school*																
f. developed by another school* unmodified																
g. modified by another school*																
h. developed by another school* and modified by your school*																
i. developed by your school* unmodified																
j. developed by your school* and modified																
k. developed by your school* specifically for the hearing impaired unmodified																
l. other, please explain																
_____																
_____																
_____																

3. Please tell me, briefly, why your school/program decided to (select, develop, adapt) the _____ curriculum you use.
(K-6 math)

INTERVIEWER'S INSTRUCTIONS

- Ask this question based upon the answer to the previous question. If they said they developed their own curriculum, then use the verb "develop" in your question. If they said they modified a state mandated, a commercial, or another school's curriculum, then use the verb "adapt."
- Repeat the question for each subject area and grade level that has been identified for this respondent.
- Code grade level responses under each subject area.
- Summarize the respondent's answer to verify it. At the end of your summary ask "Does my summary accurately reflect your response?",

MATH CURRICULUM

READING CURRICULUM

SCIENCE CURRICULUM

WRITING CURRICULUM

4. In the previous questions you have provided a description of your curriculum(s). Please tell me about three benefits or strengths of your curriculum(s) in general.

A list of possible sources or bases for identifying strengths has been provided on page 3 of your interview notes. If none of these appropriately identify your source of information, what other bases do you have for identifying this strength? Describe _____ (first, second, third) _____ strength of your curriculum(s) in general. How did you identify this strength?

INTERVIEWER'S INSTRUCTIONS

- Repeat the question for all three strengths and record those strengths and the reasons for indicating them.
- Paraphrase each response for verification.

Sources/Bases For Identification of Strengths

a. student performance
b. personal use/experience/observation
c. teacher feedback
d. feedback from consultants
e. review by curriculum team
f. feedback from accreditation team
g. alumni feedback
h. parent feedback
i. community feedback
j. administrative review
k. research and current literature
l. other sources

Strengths	Source/Bases
#1	#1
#2	#2
#3	#3

5. Now, please tell me three weaknesses or problem areas that you have noted concerning your curriculum in general. Describe _____ (first, second, third) weakness of your curriculum(s) in general. How did you identify this problem? What are possible solutions to this problem?

INTERVIEWER'S INSTRUCTIONS

- Repeat the question for all three weaknesses and record those weaknesses and the respondent's means of identifying them in the spaces provided.
- Paraphrase each response for verification.

Sources/Bases For Identification of Weaknesses

a. student performance
b. personal use/experience/observation
c. teacher feedback
d. feedback from consultants
e. review by curriculum team
f. feedback from accreditation team
g. alumni feedback
h. parent feedback
i. community feedback
j. administrative review
k. research and current literature
l. other sources

Weaknesses	Source/Bases	Possible Solution
#1	#1	#1
#2	#2	#2
#3	#3	#3

CURRICULUM DEVELOPMENT AND MONITORING

6. The next few questions will be about your curriculum development and monitoring process. Please give me a brief description of the process or procedures that your school/program uses to develop and monitor your curriculum. How do you do this in your school/program?

> INTERVIEWER'S INSTRUCTIONS
>
> - After you have recorded the response, summarize it to the respondent and ask "Is my summary an accurate description of your answer?"

_____

_____

_____

_____

7. Is there a written plan or set of procedures for the process that you have just described?

NO ____

YES ____ If YES what do you call your plan or set of procedures?

_____

_____

Which subject areas and grade levels is your plan or set of procedures used for?

MATH				SCIENCE				READING				WRITING			
Pre-K	K-6	7-9	10-12	Pre-K	K-6	7-9	10-12	Pre-K	K-6	7-9	10-12	Pre-K	K-6	7-9	10-12

8. Does the plan or approach you use specify that time periods will be set aside (other than teacher planning time) for curriculum development and monitoring work sessions? Is this consistent for all subject areas and grade levels?

INTERVIEWER'S INSTRUCTIONS

- Record each "YES" as a check mark in the appropriate column. A "NO" would be left blank.

MATH				SCIENCE				READING				WRITING			
Pre-K	K-6	7-9	10-12	Pre-K	K-6	7-9	10-12	Pre-K	K-6	7-9	10-12	Pre-K	K-6	7-9	10-12

If some "yes" answers were recorded, go to question 9. If none of the answers are yes, go to question 10.

9. How often do these time periods/work sessions occur?

	MATH				SCIENCE				READING				WRITING			
	Pre-K	K-6	7-9	10-12	Pre-K	K-6	7-9	10-12	Pre-K	K-6	7-9	10-12	Pre-K	K-6	7-9	10-12
a. weekly																
b. monthly																
c. quarterly																
d. semi-annually																
e. annually																
f. other, please describe																
_____																
_____																
_____																

10. Who is responsible for coordinating/overseeing the curriculum development and monitoring process in _____ (math) at your _____ (K-6) level?

INTERVIEWER'S INSTRUCTIONS

- Have respondent identify a position or title; not an individual by name (question 10 and 11).
- Repeat this questions for each subject area and grade level that has been identified for this respondent.

	MATH				SCIENCE				READING				WRITING			
	Pre-K	K-6	7-9	10-12	Pre-K	K-6	7-9	10-12	Pre-K	K-6	7-9	10-12	Pre-K	K-6	7-9	10-12
a. Superintendent of local school district																
b. Assistant Superintendent of local school district																
c. Principal in your school/program																
d. Assistant Principal in your school/program																
e. Curriculum specialist(s)/curriculum developers																
f. Team leaders/master teachers																
g. Department chairperson (Math, English, etc.)																
h. Supervising teacher																
i. Teachers																
j. Other, please explain																
_____																
_____																
_____																

11. Who is directly involved in the actual curriculum development and curriculum monitoring work sessions in _____ (Math) at your _____ (K-6) level?

INTERVIEWER'S INSTRUCTIONS

- Record the respondent's answers to this as asterisks (*) in the columns under number 10.

12. We have discussed some of the aspects of your curriculum development and monitoring process(es). Can you provide some input regarding what you perceive as the three strengths of the processes or approaches that are used in your school/program?

Please tell me what you perceive as _____ (first, second, third) benefit or strength of your curriculum development and monitoring process(es) and your basis for identifying that as a strength. Refer to the list of possible sources or bases for identifying strengths on page 3 of your interview notes.

INTERVIEWER'S INSTRUCTIONS

- Repeat the question for all three strengths and the reasons for reporting them.
- Paraphrase each response for verification.

Sources/Bases For Identification of Strengths

a. student performance
b. personal use/experience/observation
c. teacher feedback
d. feedback from consultants
e. review by curriculum team
f. feedback from accreditation team
g. alumni feedback
h. parent feedback
i. community feedback
j. administrative review
k. research and current literature
l. other sources

Strengths	Source/Bases
#1	#1
#2	#2
#3	#3

13. Now, please tell me three weaknesses or problem areas that you have noted concerning your approach to curriculum development and monitoring and your basis for indicating each one.

What is _____ weakness? How did you identify this problem? What are possible solutions to this problem?
(first, second, third)

40

INTERVIEWER'S INSTRUCTIONS

- Repeat the question for each weakness.
- Paraphrase each response for verification.

Sources/Bases For Identification of Weaknesses

a. student performance
b. personal use/experience/observation
c. teacher feedback
d. feedback from consultants
e. review by curriculum team
f. feedback from accreditation team
g. alumni feedback
h. parent feedback
i. community feedback
j. administrative review
k. research and current literature
l. other sources

Weaknesses	Source/Bases	Possible Solution
#1	#1	#1
#2	#2	#2
#3	#3	#3

CURRICULUM TRAINING

14. We've finished the questions on curriculum development and monitoring. The next few questions will deal with efforts to train faculty and staff to implement and support your curriculum. Which of the curriculum training and/or information-sharing activities listed on page 4 of your interview notes occur in your school/program? Please indicate the four activities that occur most frequently for each subject area and level.

For your _____(math)_____ curriculum at the _____(K-6)_____ level, which four kinds of training and/or information-sharing activities occur most frequently in your school/program? (list four only)

> **INTERVIEWER'S INSTRUCTIONS**
>
> • Repeat the question for each subject area and grade level that has been identified for this respondent.

Training and Information-Sharing Activities	MATH				SCIENCE				READING				WRITING			
	Pre-K	K-6	7-9	10-12	Pre-K	K-6	7-9	10-12	Pre-K	K-6	7-9	10-12	Pre-K	K-6	7-9	10-12
a. inservice workshops																
b. inservice lectures																
c. training from consultants																
d. formal coursework																
e. training through professional organizations																
f. self-study through use of texts, workbooks, videotapes and/or computer aided instruction																
g. peer tutoring among teachers																
h. informal information sharing and observation by teachers																
i. other, please describe																
_____																
_____																
_____																

If a, b, or c above have received any checks, go to question 15. If a, b, or c above have received no checks, go to question 17.

15. You indicated that inservice or consultant curriculum training occurs in your school/program. How often does curriculum training occur in the following settings?

	Frequency	Notes if Needed
a) staff development days		
b) faculty meetings		
c) department meetings		
d) planning time(s)		
e) after school (by special schedules)		
f) weekends (by special scheduling)		
g) other, please describe		

INTERVIEWER'S INSTRUCTIONS

- If a respondent does not readily cite any of the above situations as the setting for inservice or consultant curriculum training, then probe as to when the inservice or consultant curriculum training noted in the previous question occurs (and record under "other.")

16. Please identify the title(s) of the persons who provide inservice or consultant curriculum training.

INTERVIEWER'S INSTRUCTIONS
• Wait for the responses. The respondents do not have the two lists below; however, do not read the lists to them.
• Probe to clarify that the respondent has considered both internal and exernal trainers.

a) Internal Consultants/Personnel Within Your School

- ☐ 1) teachers
- ☐ 2) supervisors
- ☐ 3) principals
- ☐ 4) assistant principals
- ☐ 5) curriculum specialists'
- ☐ 6) team leaders/masters teachers
- ☐ 7) other(s) please list _____

If some of these consultants or trainers do not come from your school/program, what organization/institution do they represent?

b) External Consultants/Personnel From:

- ☐ 1) local school district
- ☐ 2) state school district
- ☐ 3) colleges/universities
- ☐ 4) public schools
- ☐ 5) schools for the deaf
- ☐ 6) other(s) please list _____

17. Look at the list of curriculum implementation steps listed on page 4 of your interview notes.

For your _____ (Math) curriculum at the _____ (K-6) level, which of these implementation steps have your teachers received training in?

INTERVIEWER'S INSTRUCTIONS

- If the respondent has indicated that teacher training is program/school wide, modify the above question; otherwise, repeat the question for each subject area and grade level as appropriate.
- Record the responses with checkmarks.

	MATH				SCIENCE				READING				WRITING			
	Pre-K	K-6	7-9	10-12	Pre-K	K-6	7-9	10-12	Pre-K	K-6	7-9	10-12	Pre-K	K-6	7-9	10-12
a. developing and writing objectives																
b. interpreting objectives																
c. developing test items/measurements																
d. structuring content																
e. designing activities																
f. locating resources																
g. selecting materials																
h. modifying materials																
i. producing materials																
j. evaluating student competence																
k. field testing and revising materials																
l. documenting instructional activities																
m. other please explain																
_____																
_____																
_____																

18. You have indicated that certain kinds of curriculum implementation training have been received. Now please tell me for which areas you feel more training is needed.

I will ask for your answers by subject area and grade level again. Please limit your responses to a total of three areas for each grade level under the subject areas.

Think of your _____ curriculum at the _____level. In what three areas do you feel more training is required?
(Math) (K-6)

> **INTERVIEWER'S INSTRUCTIONS**
>
> - Record the responses as asterisks (*) in the appropriate columns of item # 17.

---

19. In your estimation, what percentage of their work week do teachers, on the average, spend on all of the curriculum implementation steps listed on your interview notes. If appropriate, please respond separately for each subject area at each level.

> **INTERVIEWER'S INSTRUCTIONS**
>
> - Repeat the question for each subject area and grade if that appears appropriate.
> - Record the responses as percentages or hours in the appropriate columns. Label as % or hrs.

a. developing and writing objectives
b. interpreting objectives
c. developing test items/measurements
d. structuring content
e. designing activities
f. locating resources
g. selecting materials
h. modifying materials
i. producing materials
j. evaluating student competence
k. field testing and revising materials
l. documenting instructional activities
m. other, please explain _____

_____

MATH				SCIENCE				READING				WRITING			
Pre-K	K-6	7-9	10-12	Pre-K	K-6	7-9	10-12	Pre-K	K-6	7-9	10-12	Pre-K	K-6	7-9	10-12

20. We have discussed some aspects of your curriculum training process. As I did at the end of the previous section, I will now ask you to tell me briefly about what you feel are strengths or benefits of the training aspect of your curriculum process and your basis or reason for identifying those strengths.

What is _____ strength of your curriculum training process at your school/program? How did you identify this strength? Remember a list of potential sources of information is on page 3 of your interview notes.
(first, second, third)

INTERVIEWER'S INSTRUCTIONS

- Repeat the question for all three strengths and record those strengths and the respondents reason for indicating them.
- Paraphrase each response for verification.

Sources/Bases For Identification of Strengths

a. student performance
b. personal use/experience/observation
c. teacher feedback
d. feedback from consultants
e. review by curriculum team
f. feedback from accreditation team
g. alumni feedback
h. parent feedback
i. community feedback
j. administrative review
k. research and current literature
l. other sources

Strengths	Source/Bases
#1	#1
#2	#2
#3	#3

21. Now, please tell me three weaknesses or problem areas that you have noted concerning your curriculum training and your basis for identifying each weakness.

What is _____ weakness. How did you identify this problem? Refer again to your list of possible sources of information. What are possible solutions to this problem?
(first, second, third)

INTERVIEWER'S INSTRUCTIONS

- Repeat the question for each weakness.
- Paraphrase each response for verification.

Sources/Bases For Identification of Weaknesses

a. student performance
b. personal use/experience/observation
c. teacher feedback
d. feedback from consultants
e. review by curriculum team
f. feedback from accreditation team
g. alumni feedback
h. parent feedback
i. community feedback
j. administrative review
k. research and current literature
l. other sources

Weaknesses	Source/Basis	Possible Solution
#1	#1	#1
#2	#2	#2
#3	#3	#3

CURRICULUM REVIEW/REVISION

22. The last section of our interview deals with curriculum review and revision. What methods are most commonly used to gather information when conducting curriculum review/revisions in _____ (Math) at the _____ (K-7) level.

> **INTERVIEWER'S INSTRUCTIONS**
>
> - Use check marks to indicate responses of the respondent.
> - Respondent does not have the following list. Examples from the list may have to be given to cue the respondent.

	MATH				SCIENCE				READING				WRITING			
	Pre-K	K-6	7-9	10-12	Pre-K	K-6	7-9	10-12	Pre-K	K-6	7-9	10-12	Pre-K	K-6	7-9	10-12
a. formal periodic meetings																
b. written suggestions from teachers																
c. formal data collection such as surveys or questionnaires																
d. discussions involving teachers and teacher supervisors or principals																
e. observations by supervisors or others																
f. other methods, please describe																
_____																
_____																

23. For your _____ (Math) curriculum at the _____ (K-7) level, you indicated that items __, __, __, were the most commonly used methods. Please tell me which one of these you feel has been the most effective method used when conducting review/revision.

> **INTERVIEWER'S INSTRUCTIONS**
>
> - Repeat the question for each subject area and grade level that has been identified for this respondent.
> - Record the response for each subject area and grade level as an asterisk (*) under the appropriate columns in number 22.

24. Please look on page 5 of your interview notes at the list of factors that influence curriculum review and revision. As I read each subject area and academic level, please tell me which five factors have been most influential for that subject area and grade level in your school as you reviewed and revised that curriculum.

INTERVIEWER'S INSTRUCTIONS

- Repeat the question for all subject area and grade levels that have been identified for this respondent.
- Record the responses by checking the appropriate line under each column.

Factors that Influence Curriculum Review and Revision	MATH				SCIENCE				READING				WRITING			
	Pre-K	K-6	7-9	10-12	Pre-K	K-6	7-9	10-12	Pre-K	K-6	7-9	10-12	Pre-K	K-6	7-9	10-12
a. IEP-related influences (student needs)																
b. needs assessment(s)																
c. state mandates/laws																
d. local mandates/laws																
e. community influence																
f. parents																
g. teachers																
h. curriculum team/curriculum specialists																
i. student feedback																
j. administration in your school/program																
k. board of education																
l. accreditation process/guidelines influence																
m. utilization of commercially produced textbook																
n. influence of previously existing curriculum																
o. influence of current development theories and literature																
p. educational consultants																
q. monetary constraints																
r. personnel shortages (i.e., teachers, curriculum specialists, etc.)																
s. other influences, please describe																

25. Please look at the list of factors on page 5 of your interview notes again. This time, as I read the names of the subject areas and academic levels, please tell me which <u>five</u> factors you feel <u>should</u> <u>be</u> most influential in the review and revision of that curriculum.

INTERVIEWER'S INSTRUCTIONS

- Repeat the subject area and grade level for all levels that has been identified for this respondent.
- Record their reponses as asterisks (*) in the appropriate columns of question 24.

26. How often are formal decisions made that result in a change in your curriculum?

How often does this occur for your ___(Math)___ curriculum at the ___(K-7)___ level?

INTERVIEWER'S INSTRUCTIONS

- Repeat the question for each subject area and grade level that have been identified for this respondent.

	MATH				SCIENCE				READING				WRITING			
	Pre-K	K-6	7-9	10-12	Pre-K	K-6	7-9	10-12	Pre-K	K-6	7-9	10-12	Pre-K	K-6	7-9	10-12
a. annually																
b. semi-annually																
c. quarterly																
d. as needed, please indicate approximate time																
e. other, please describe																
f. don't know																

27. Who is responsible for making recommendations to revise your _____ (Math) curriculum at the _____ (K-7) level? Please give me the title(s) of these individual(s).

INTERVIEWER'S INSTRUCTIONS

- Allow for more than one response for each/any subject area/grade level.
- Repeat the question for each subject area and grade level that have been identified for this respondent.

	MATH				SCIENCE				READING				WRITING			
	Pre-K	K-6	7-9	10-12	Pre-K	K-6	7-9	10-12	Pre-K	K-6	7-9	10-12	Pre-K	K-6	7-9	10-12
a. Superintendent of local school district																
b. Assistant Superintendent of local school district																
c. Principal in your school/program																
d. Assistant Principal in your school/program																
e. Curriculum specialist(s)/curriculum developers																
f. Team leaders/master teachers																
g. Department chairperson (math, English, etc.)																
h. Supervising teacher																
i. Teachers																
j. Other(s), please list title(s)																
_____																
_____																
_____																

28. When recommendations for revisions to the curriculum have been made, who is responsible for making the final decisions about those revisions?

Who makes these decisions regarding revisions to your _____ (Math) curriculum at the _____ (K-7) level? Please give me the title(s) of the individual(s).

INTERVIEWER'S INSTRUCTIONS

- Repeat the question for all subject areas and grade levels that have been identified for this respondent.

	MATH				SCIENCE				READING				WRITING			
	Pre-K	K-6	7-9	10-12	Pre-K	K-6	7-9	10-12	Pre-K	K-6	7-9	10-12	Pre-K	K-6	7-9	10-12
a. Superintendent of local school district																
b. Assistant Superintendent of local school district																
c. Principal in your school/program																
d. Assistant Principal in your school/program																
e. Curriculum specialist(s)/curriculum developers																
f. Team leaders/master teachers																
g. Department chairperson (math, English, etc.)																
h. Supervising teacher																
i. Teachers																
j. Other(s), please list title(s)																
_____																
_____																
_____																

29. In your opinion, what are three strengths of your curriculum review/revision process (e.g. sufficient time is alloted for the process, teacher input, etc.)?

What is _____ strength or benefit of your curriculum review and revision process? What is your basis for identifying this strength? Remember the list of possible sources of data on page 3 of your interview notes.
(first, second, third)

INTERVIEWER'S INSTRUCTIONS

- Repeat the question for all three strengths and record those strengths and the respondent's reason for indicating them.
- Paraphrase each response for verification.

Sources/Bases For Identification of Strengths

a. student performance
b. personal use/experience/observation
c. teacher feedback
d. feedback from consultants
e. review by curriculum team
f. feedback from accreditation team
g. alumni feedback
h. parent feedback
i. community feedback
j. administrative review
k. research and current literature
l. other sources

Strengths	Source/Bases
#1	#1
#2	#2
#3	#3

30. Now, please tell me three weaknesses that you have noted concerning your curriculum review/revision process. What is _____ (first, second, third) weakness or problem area of your curriculum review/revision process? How did you identify this problem? What are possible solutions to this problem?

INTERVIEWER'S INSTRUCTIONS

- Repeat the question for all three weaknesses and record those weaknesses and the respondent's means of identifying them.
- Paraphrase each response for verification.

Sources/Bases For Identification of Weaknesses

a. student performance
b. personal use/experience/observation
c. teacher feedback
d. feedback from consultants
e. review by curriculum team
f. feedback from accreditation team
g. alumni feedback
h. parent feedback
i. community feedback
j. administrative review
k. research and current literature
l. other sources

Weaknesses	Source/Bases	Possible Solution
#1	#1	#1
#2	#2	#2
#3	#3	#3

Appendix E: Teachers' Survey

SCOPE

Systematic Collaborative Outreach Project Effort

A Joint Project of
Pre-College Programs at
Gallaudet College and the
National Technical Institute for the Deaf
at Rochester Institute of Technology

This questionnaire is for _____

Systematic Collaborative Outreach Project Effort (SCOPE) is a national curriculum project between Gallaudet College Pre-College Programs and the National Technical Institute for the Deaf.

This questionnaire is part of a study to collect information about how curriculum is developed, implemented, and revised in programs for deaf students. When you respond to the questions, please answer based on what the majority of teachers do at your school who teach the _____ curriculum at the _____ level.

There are six sections to this questionnaire:

- CURRICULUM DEVELOPMENT
- CURRICULUM MONITORING
- CURRICULUM IMPLEMENTATION AND TRAINING
- INSTRUCTIONAL MATERIALS UTILIZATION
- CURRICULUM REVIEW AND REVISION
- SUMMARY QUESTIONS

Please complete all sections and return directly to SCOPE in the attached postage-paid envelope by _____.

Thank you.

CURRICULUM DEVELOPMENT

1. When curriculum development work is done in your subject area, in which of the following activities do teachers participate? If teachers do the actual work, put a check mark under the column marked WORK. If teachers provide input or review but work is done by others i.e., curriculum specialist, principal, etc., check under the column marked INPUT ONLY.

WORK	INPUT ONLY

   a. Definition and writing of philosophy for the curriculum
   b. Definition and writing of curriculum goals and learning objectives
   c. Writing/planning of comprehensive curriculum outline
   d. Identification and review of commercial text and instructional material series in subject area for use in curriculum
   e. Identification and review of curriculums and materials from other schools
   f. Development of strategies for testing student performance on curriculum objectives
   g. Development of evaluation activities and strategies to assess the effectiveness of the curriculum
   h. Other (please describe) _____

_____

CURRICULUM MONITORING

2. Indicate with a check mark under the column marked MONITORING OCCURS, which of the following curriculum monitoring activities occur in your subject area.

   Under the column marked, TEACHERS INVOLVED, check which of the curriculum monitoring activities involve teachers.

MONITORING OCCURS	TEACHERS INVOLVED

   a. Monitoring instruction to insure that instructional objectives are taught
   b. Monitoring suitability of content and content level for student population
   c. Monitoring instruction to identify content areas of the curriculum **most responsive** to students' needs
   d. Identifying specific instructional materials and media that have been **most responsive** to students' needs
   e. Other (please describe) _____

_____

3. How is the curriculum monitored to insure that the curriculum objectives are being taught? CIRCLE as many responses as are appropriate.

   a. review of lesson plans
   b. classroom observations
   c. discussions, conferences, or meetings
   d. use of implementation goals checklist
   e. review of IEP
   f. student performance and testing results
   g. other methods (please describe) _____

_____

CURRICULUM IMPLEMENTATION TRAINING

4. This is a three-part question related to skill area training provided by your school or school system.

   4.1. Indicate with a check mark under the column marked TRAINING OCCURRED, skill areas for which your school has provided training opportunities in the past three years.

   4.2. Under the column marked TRAINING NEEDED, indicate in which skill areas the teachers in your subject area need training.

   a. developing and writing objectives
   b. interpreting objectives
   c. developing test items and measurements
   d. sequencing content
   e. developing activities and materials
   f. locating resources
   g. selecting materials
   h. modifying materials
   i. field testing and revising materials
   j. documenting instructional activities
   k. other (please explain) _____

TRAINING OCCURRED	TRAINING NEEDED	MOST USEFUL

   4.3. Considering all skills listed above regardless of whether training occurred or is needed, indicate the THREE skill areas most necessary or useful to teaching in your subject area by marking under the column labeled MOST USEFUL.

5. Indicate in the column marked MOST FREQUENT, the FOUR types of curriculum implementation training that occur most frequently. Indicate in the column marked MOST USEFUL, the FOUR types of training activities that have proven most useful.

TRAINING AND INFORMATION SHARING ACTIVITIES

a. inservice workshops
b. inservice lectures
c. training from school-hired consultants
d. formal coursework
e. training through professional organizations
f. self-study through use of texts, workbooks, video tapes and/or computer aided instruction
g. peer tutoring among teachers
h. other (please describe) _____

_____

MOST FREQUENT	MOST USEFUL

6. If you checked MOST FREQUENT, for a., b. or c. (inservice workshops, inservice lectures, training from consultants) in question 5, identify when the training typically occurs by CIRCLING ONE of the following.

a. staff development days
b. school-wide faculty meetings
c. department meetings
d. planning time(s)
e. after school (by special scheduling)
f. weekends (by special scheduling)
g. other (please describe) _____

INSTRUCTIONAL MATERIALS UTILIZATION

7. How often do teachers in your subject area use each of these types of instructional materials (teacher-made or commercially produced)?

	NOT USED AT ALL	SELDOM USED	OCCAS. USED	FREQ. USED	USED MOST FREQ.
a. textbooks					
b. workbooks					
c. films					
d. filmloops (super 8)					
e. filmstrips					
f. videotapes					
g. educational TV (network/cable)					
h. overhead transparencies					
i. pictures					
j. encyclopedias, dictionaries and the like					
k. books (fiction and non-fiction)					
l. computer software					
m. packaged games					
n. supplementary print materials (i.e., readings, magazines)					
o. handout(s) (i.e., worksheets, study guides, modules)					
p. slides (35mm)					
q. other (please describe) _____ _____					

8. Based on your experience in your school and subject area what media and/or materials would be used (ideally) if they were available and affordable? (Please list no more than THREE.)

_____

_____

_____

9. What are the TWO most common sources for the instructional materials used to support the curriculum in your subject area and at the level? Circle the TWO most appropriate responses.

a. developed in the school by an instructional materials developer or team

b. developed by teachers

c. purchased from commercial sources

d. adapted commercially produced materials

e. materials development consultant contracted to produce materials

f. Other (please describe) _____

_____

10. If you responded to question #9 (above) by marking items c. or d. AND are using a series, identify the commercial series name and/or publisher of those materials.

_____

_____

11. In your subject area, have you or any of your colleagues been able to make curricular changes that affected the levels listed below? If the change was made independently (by the teacher alone), indicate this in the column marked INDEPENDENTLY. If the change was made formally (through administrative channels), indicate this in the column marked FORMALLY.

LEVELS AFFECTED BY CURRICULAR CHANGES	INDEPENDENTLY	FORMALLY
a. one student in your class		
b. several students in your class		
c. a few students in your and other classes		
d. your whole class		
e. your whole department		
f. your and other departments		
g. the whole program		
h. the total written curriculum		
i. curricular policy and process		

CURRICULUM REVIEW AND REVISION

12. In the column marked DO INFLUENCE, indicate which FIVE factors have had the most influence on curriculum review and revision.

In the column marked SHOULD INFLUENCE, indicate which FIVE factors **should** have the most influence on the curriculum review and revision process in your subject area.

FACTORS THAT INFLUENCE CURRICULUM REVIEW AND REVISION	DO INFLUENCE	SHOULD INFLUENCE
a. IEP-related influences (student needs)		
b. needs assessment(s)		
c. state mandates/laws		
d. local mandates/laws		
e. community		
f. parents		
g. teachers		
h. student feedback		
i. administration in your school/program		
j. board of education		
k. accreditation process/guidelines		
l. utilization of commercially produced text		
m. previously existing curriculum		
n. current development theories and literature		
o. educational consultants		
p. monetary constraints		
q. personnel shortages (i.e., teachers, curriculum specialists, etc.)		
r. other influences (please describe) _____		
_____		

13. Who are the key individuals involved in the curriculum processes in your school? CIRCLE the appropriate responses.

a. superintendent/director/head of school
b. assistant director/superintendent
c. principal in your school/program
d. assistant principal in your school/program
e. curriculum specialist/curriculum developer
f. team leaders/master teachers
g. department chairperson (math, English, etc.)
h. supervising teacher
i. teachers
j. outside consultants
k. other (please describe) _____

_____

14. This is a three-part question related to strengths and weaknesses of the overall curriculum.

14.1. Under STRENGTHS, identify THREE benefits or strengths of the curriculum in your subject at your level.

Under SOURCES, identify how you determined the strengths. A number of possible sources are listed below.

STRENGTHS	SOURCES
a. _____	a. _____
b. _____	b. _____
c. _____	c. _____

14.2. Under WEAKNESSES, identify THREE weaknesses of the curriculum in your subject at your level.

Under SOURCES, identify how you determined the weaknesses. Refer again to the list of possible sources.

WEAKNESSES	SOURCES
a. _____	a. _____
b. _____	b. _____
c. _____	c. _____

14.3. For each weakness indicate a possible solution.

POSSIBLE SOLUTIONS

a. _____
b. _____
c. _____

Possible Sources for Identification of Strengths and Weaknesses

1. student performance
2. personal use/experience/observation
3. teacher feedback
4. feedback from consultants
5. review by curriculum
6. feedback from accreditation team
7. alumni feedback
8. parent feedback
9. community feedback
10. administrative review
11. research and current literature
12. other sources (please identify)

Please return directly to SCOPE in the attached postage-paid envelope. Thank you.

Appendix F: Figures

1. Type of programs in survey.
2. Teacher questionnaires completed.
3. Existence of curriculum components.
4. Original sources of curriculum.
5. Curriculum development and monitoring plans.
6. Specific times to develop and monitor.

FIGURE 1

TYPE OF PROGRAMS IN SURVEY
(Total = 47; D = Day; R = Residential)

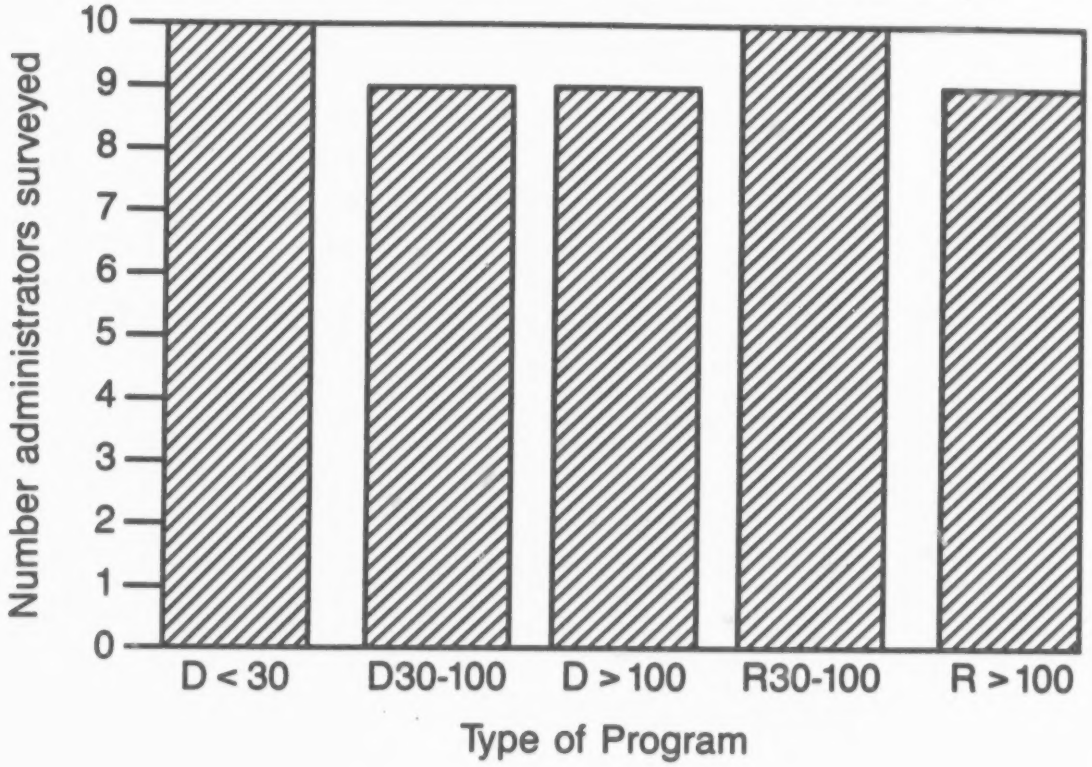


FIGURE 2

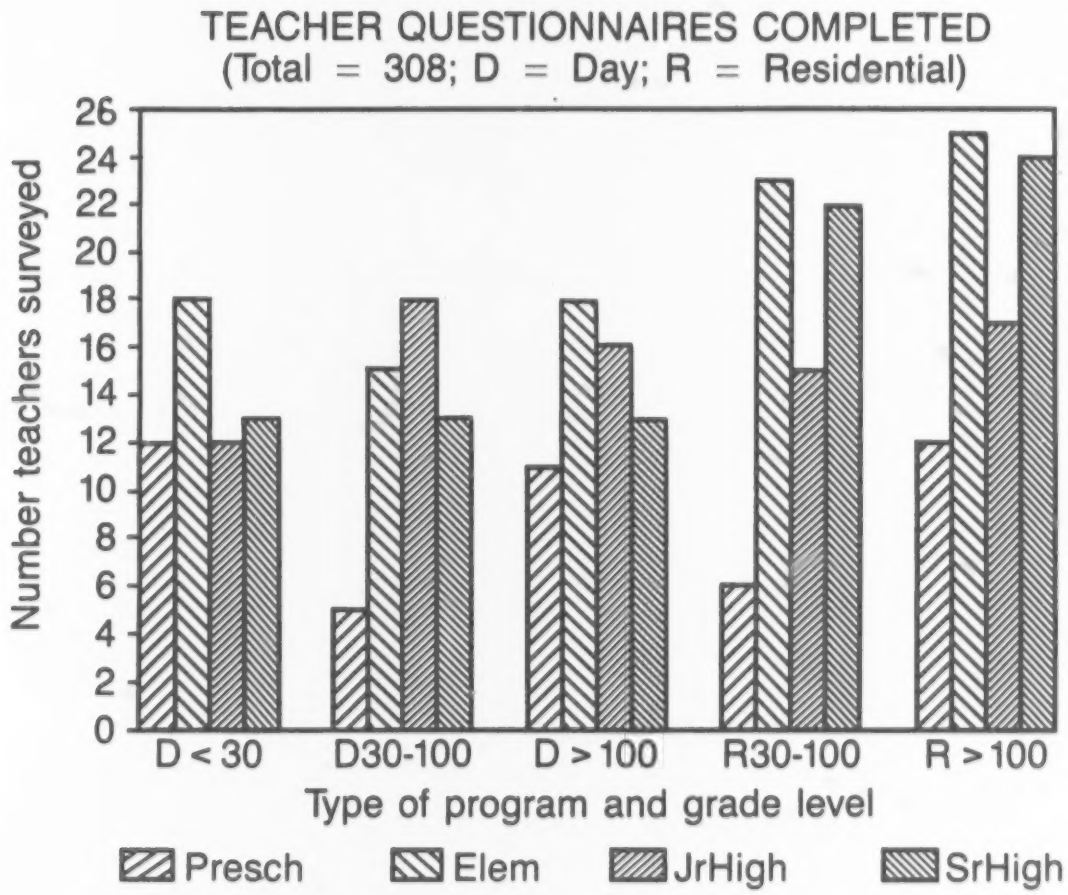

TEACHER QUESTIONNAIRES COMPLETED
(Total = 308; D = Day; R = Residential)
Number teachers surveyed
0
2
4
6
8
10
12
14
16
18
20
22
24
26
D < 30
D30-100
D > 100
R30-100
R > 100
Type of program and grade level
Presch
Elem
JrHigh
SrHigh

FIGURE 3

EXISTENCE OF CURRICULUM COMPONENTS
(Percent with all, some, or none)

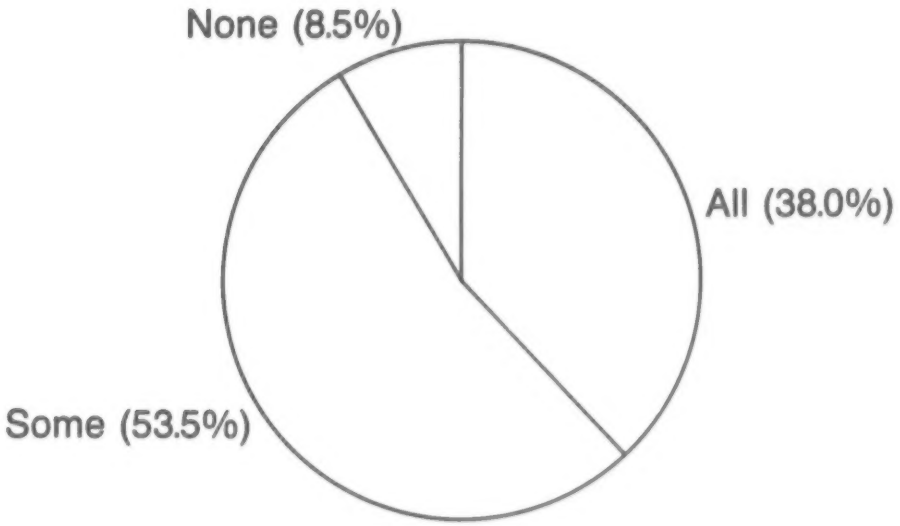


FIGURE 4

ORIGINAL SOURCES OF CURRICULUM

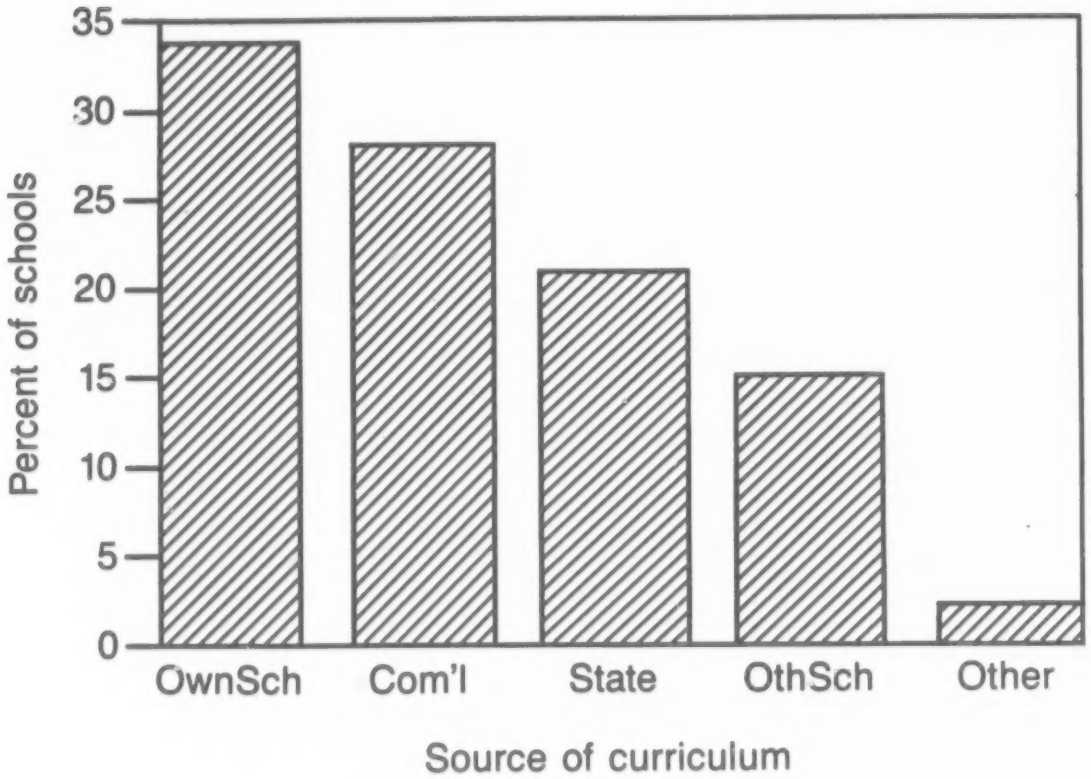


FIGURE 5

CURRICULUM DEVELOPMENT AND MONITORING PLANS
(D = Day; R = Residential)

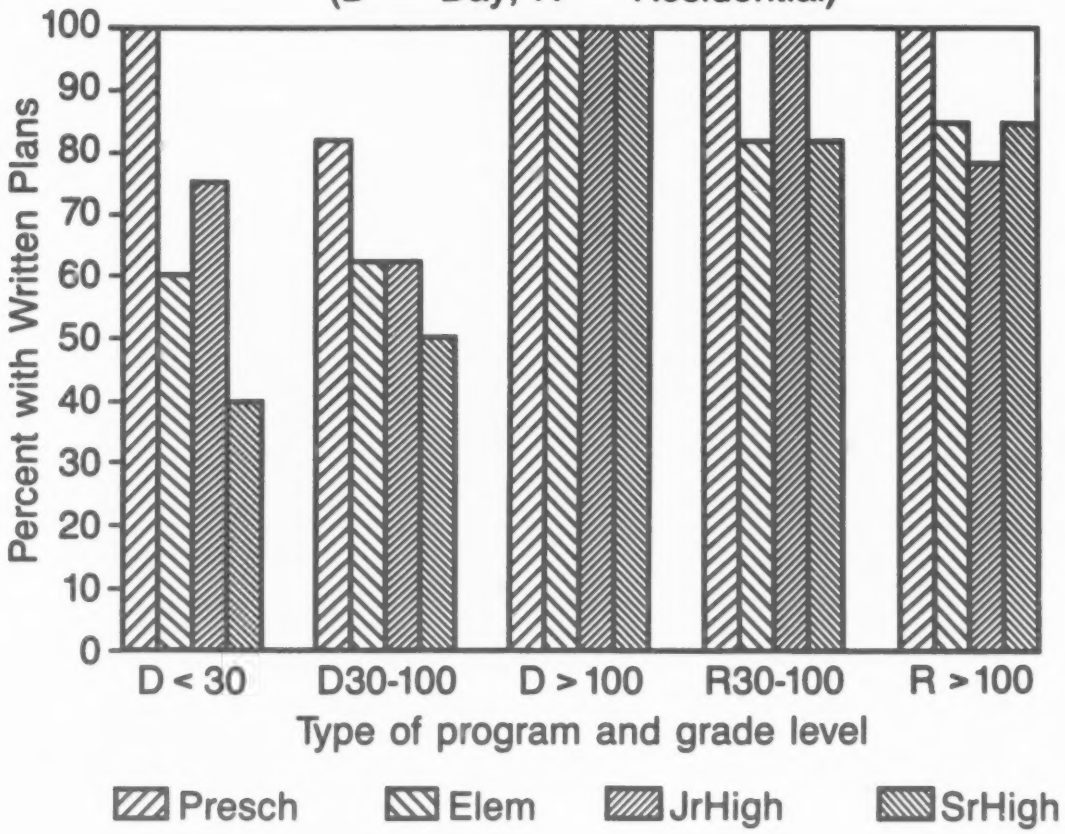
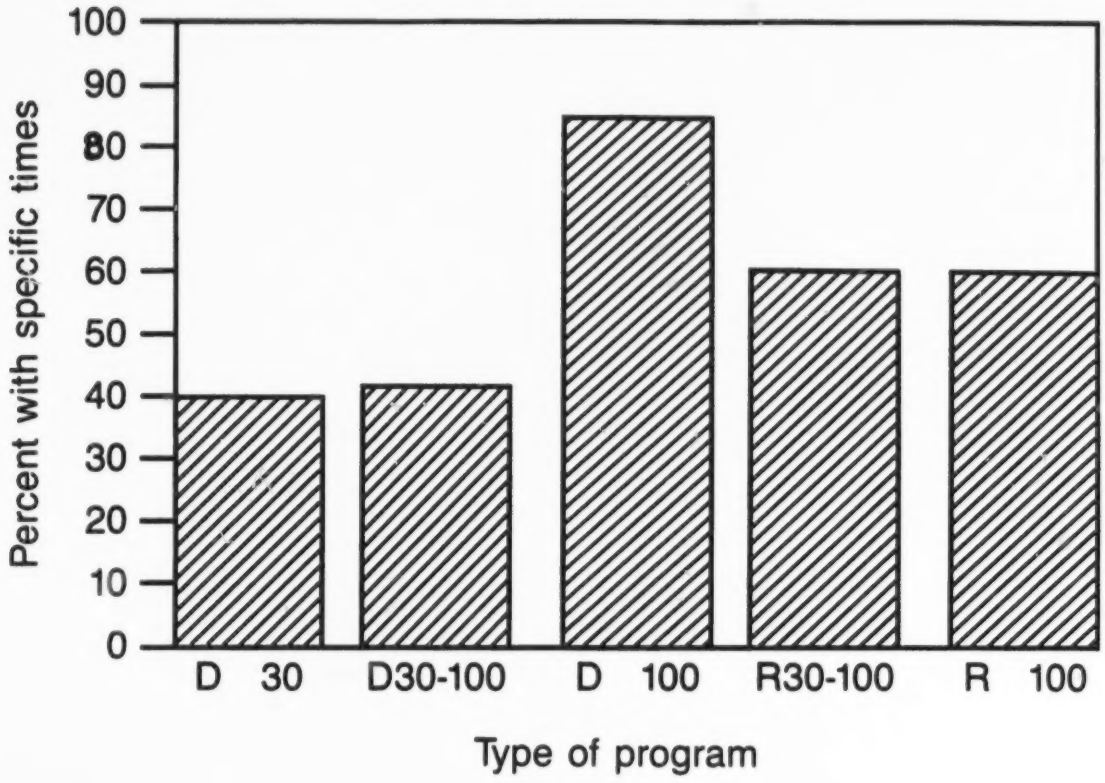


FIGURE 6

SPECIFIC TIMES TO DEVELOP AND MONITOR

(D = Day; R = Residential)



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